

CLAIMS

1. Mycotoxin adsorbent, containing
- a) an organically modified (organophilic) layered silicate, in which quaternary onium compounds with at least one long chain C_{10} to C_{22} alkyl group and at least one aromatic substituent are used for modification,
- or
- b) a mixture of a nonorganically modified layered silicate and a layered silicate organically modified to at least 75%, referred to the total cation exchange capacity (CEC).
2. Mycotoxin adsorbent according to Claim 1, characterized by the fact that a quaternary ammonium compound is used as quaternary onium compound, especially with a C_{14} to C_{18} alkyl group.
3. Mycotoxin adsorbent according to Claim 1 or 2, characterized by the fact that stearylbenzyltrimethylammonium chloride, coconut alkyltrimethylbenzylammonium chloride, dimethyl-laurylbenzylammonium chloride, distearyl-methylbenzylammonium chloride or quaternized tallow imidazolinium methosulfate is used as quaternary onium compound.
4. Mycotoxin adsorbent according to one of the preceding claims, characterized by the fact that a smectitic clay mineral is used as layered silicate.
5. Mycotoxin adsorbent according to one of the preceding claims, characterized by the fact that a montmorillonite-containing clay, especially bentonite, is used as layered silicate.
6. Mycotoxin adsorbent according to one of the Claims 1 a), 2 to 5, characterized by the fact that no more than 75% of the exchangeable cations (CEC) of a layered silicate are exchanged with quaternary onium compounds.

7. Mycotoxin adsorbent according to one of the Claims 1 a), 2 to 6, characterized by the fact that 2 to 30%, preferably 2 to 15%, and especially 2 to 10%, of the exchangeable cations of the layered silicate are exchanged with quaternary onium compounds.

8. Mycotoxin adsorbent according to one of the Claims 1 b), 2 to 5, characterized by the fact that the mixture contains 0.1 to 50 wt.%, especially 0.5 to 20 wt.%, and preferably 0.5 to 10 wt.%, of organically modified layered silicate.

9. Mycotoxin adsorbent according to one of the Claims 1 b), 4, 5, 8, characterized by the fact that quaternary onium compounds with at least one long chain C₁₀ to C₂₂ alkyl group and at least one aromatic substituent are used for organic modification.

10. Feed additive containing a mycotoxin adsorbent according to one of the preceding claims.

11. Premix for production of a mycotoxin adsorbent or feed additive according to one of the Claims 1 to 9, containing more than 50% organically modified layered silicate.

12. Use of the mycotoxin adsorbent according to one of the Claims 1 to 9 for adsorption of mycotoxins in feeds.

A1
add